Public Health Wales CDSC Weekly Influenza & Acute Respiratory Infection Surveillance Report



Wednesday 23rd August 2023 (covering Week 33 2023)

Current level of influenza activity: Baseline

Influenza activity trend: Stable

Confirmed influenza cases since 2022 Week 40: 7862 (3065 influenza A(H3N2), 1635 influenza A(H1N1)pdm09,

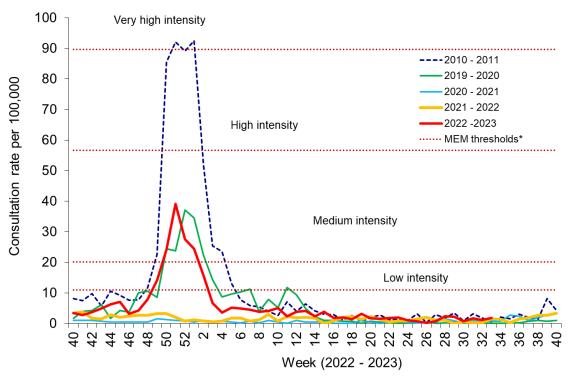
2672 influenza A(not subtyped) and 491 influenza B)

During Week 33 (ending 14/08/2023) there were zero cases of influenza, with one case reported late from previous weeks. Overall influenza activity remains at baseline levels. COVID-19 cases continue to be detected in patients in hospitals and case numbers have increased in recent weeks. In recent weeks, RSV activity in children <5y has increased in a manner consistent with an early start to the 2023/24 season in Wales. Current activity is at low intensity. SARS-CoV-2, rhinovirus, adenovirus, parainfluenza RSV and enterovirus are the most commonly detected causes of Acute Respiratory Infection (ARI).

- The Sentinel GP consultation rate for influenza-like illness (ILI) in Wales during Week 33, was 1.9 consultations per 100,000 practice population (Table 1). This is an increase compared to the previous Week (1.2 consultations per 100,000. Figure 1).
- The Sentinel GP consultation rate for Acute Respiratory Infections (ARI) was 100.2 per 100,000 practice population during Week 33 (Table 2 and Figure 3). This remained stable compared to the previous week (100.7 per 100,000). Weekly consultations for Lower Respiratory Tract Infections increased (46.7 per 100,000) and Upper Respiratory Tract Infections (55.88 per 100,000) decreased compared to the previous week.
- The percentage of calls to **NHS Direct Wales** which were 'influenza-related' (cold/flu, cough, fever, headache, and sore throat) during Week 33 increased to 13.7% (Figure 13).
- During Week 33, 1,116 specimens received multiplex respiratory panel testing, from patients attending hospitals. These results do not include samples tested solely for SARS-CoV-2. Zero samples tested positive for influenza. Overall influenza test-positivity decreased to <0.1%. In addition, there were 201 SARS-CoV-2, 147 rhinovirus, 43 adenovirus, 38 parainfluenza, 32 RSV, 28 enterovirus, seven HMPV, four seasonal coronavirus and three mycoplasma positive samples (Figure 5). Additionally, 154 samples from patients were tested for influenza, RSV and SARS-CoV-2 only. Many of these tests may be associated with screening activities rather than diagnostic testing for patients presenting with ARI symptoms. Of these 154 samples, 47 were positive for SARS-CoV-2 (Figure 7). Furthermore, during week 33, 54 respiratory specimens were tested from patients in intensive care units (ICU) of which none was positive for influenza (Figure 8).</p>
- There were 20 surveillance samples from patients with ILI symptoms collected by **sentinel GPs and community pharmacies** during Week 33. Of the 20 samples, three tested positive for Sars-Cov-2, three for parainfluenza and two for rhinovirus (as at 23/08/2023) (Figure 4).
- From all samples where influenza subtyping information was available during week 32 (specimens receiving multiplex respiratory panel testing, from patients attending hospitals, and surveillance samples collected by sentinel GPs and community pharmacies) there were no influenza cases detected (Figure 6).
- Confirmed RSV case incidence in children aged under 5 has increased and is now at low intensity levels. In week 33 there were 18.0 confirmed cases per 100,000 in this age group. The provisional MEM threshold in Wales which predicts the start of the annual RSV season in children younger than five years is 6.3 confirmed cases per 100,000 (Figure 9).
- The 7-day rolling sums of cases hospitalised within 28 days of an influenza, RSV or Covid-19 positive test result in the community (or up to two days post-admission) were 0, 13 and 63 respectively during Week 32 (Figures 10 & 11).
- During week 33, 11 **ARI outbreaks** were reported to the Public Health Wales Health Protection team. Ten outbreaks were reported as COVID-19 and one as an acute respiratory illness. All 11 were in residential homes.
- According to EuroMoMo analysis, all-cause deaths in Wales were not in excess during week 32.

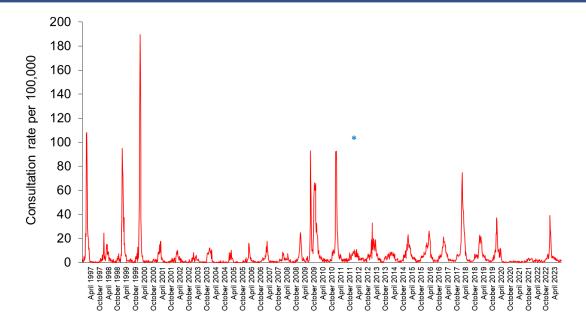
Respiratory infection activity in Wales

Figure 1. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (as of 20/08/2023)



^{*} The Moving Epidemic Method (MEM) threshold calculated for Wales ILI consultation rates is 11.1 per 100,000. MEM thresholds used in this chart are based on influenza from 2010-11 to 2018-19 seasons. Caution should be used when comparing consultation rates from March 2020 onwards to previous periods due to the changes in health-seeking behaviours brought about by the COVID-19 pandemic.

Figure 2. Clinical consultation rate for ILI per 100,000 practice population in Welsh sentinel practices (Week 48 1996 – Week 33 2023)



^{*} Reporting changed to Audit+ surveillance system

^{**}Clinical consultations for ILI seasons are monitored from W40 to W40, the most recent data is presented in red.

Table 1. Age-specific consultations (per 100,000) for ILI in Welsh sentinel practices, Week 28- Week 33 2023 (as of 20/08/2023)

Age						
group	28	29	30	31	32	33
< 1	0.0	0.0	0.0	0.0	0.0	0.0
1 - 4	0.0	0.0	0.0	0.0	0.0	0.0
5 - 14	0.0	0.0	0.0	0.0	0.0	0.0
15 - 24	6.5	0.0	2.2	2.2	0.0	4.7
25 - 34	3.8	1.9	0.0	3.8	0.0	0.0
35 - 44	5.6	3.7	1.9	3.7	3.8	2.0
45 - 64	0.9	2.7	0.0	1.8	1.9	3.0
65 - 74	2.2	2.2	2.2	0.0	0.0	0.0
75+	0.0	4.4	0.0	0.0	2.2	2.4
Total	2.4	2.2	0.7	1.7	1.2	1.9

Table 2. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 28 – Week 33 2023 (as of 20/08/2023)

Age						
group	28	29	30	31	32	33
< 1	854.4	887.3	1347.4	1159.3	1073.8	441.7
1 - 4	509.9	556.8	543.4	415.9	250.6	326.1
5 - 14	195.0	210.5	139.6	110.8	60.4	56.2
15 - 24	125.9	110.7	97.6	128.2	114.1	68.6
25 - 34	115.2	119.0	109.4	124.9	87.2	84.4
35 - 44	102.1	118.8	100.2	111.4	86.2	87.9
45 - 64	102.0	82.9	92.0	105.7	74.7	94.3
65 - 74	86.2	107.8	97.0	99.1	70.1	99.8
75+	106.7	108.9	132.9	156.7	139.2	126.7
Total	135.2	137.3	131.4	135.4	100.7	100.2

Figure 3. Age-specific consultations (per 100,000) for ARI in Welsh sentinel practices, Week 33 2022 – Week 33 2023 (as of 20/08/2023).

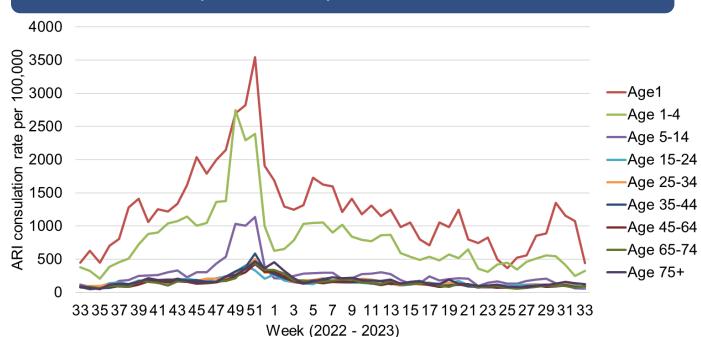
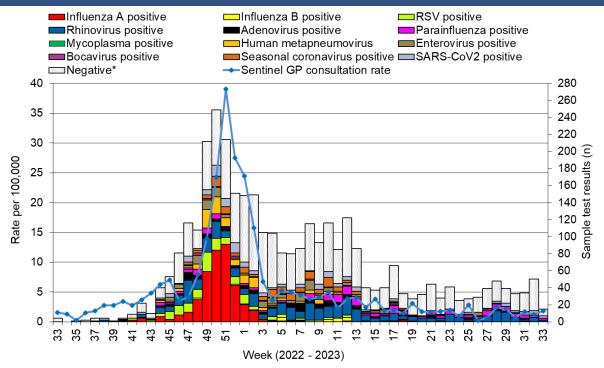
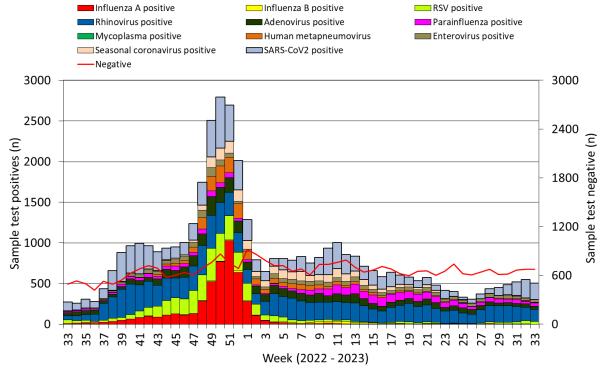


Figure 4. Specimens submitted for virological testing by sentinel GPs and community pharmacies as of 20/08/2023, by week of sample collection, Week 33 2022 to Week 33 2023.



^{*} Tested negative for influenza, adenovirus, rhinovirus, RSV, parainfluenza, mycoplasma, human metapneumovirus, enterovirus, bocavirus and coronaviruses. Samples which test positive for more than on pathogen will appear more than once in the chart. Results for the latest week will underestimate activity as not all samples will have been received, tested and authorised at time of writing this report.

Figure 5. Specimens submitted for virological testing for hospital patients and non-sentinel GPs as of 20/08/2023 by week of sample collection, Week 33 2022 to Week 33 2023.



This chart summarises respiratory panel test data and does not include data for patients tested SOLEY for SARS-CoV2. Combined data for tests carried out in Public Health Wales Microbiology: Cardiff laboratory, provided by Public Health Wales Microbiology Cardiff Specialist Virology Centre. This chart summarises individual test results, patients who are positive for multiple infections within a given week will appear multiple times. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 6. Flu subtypes based on specimens submitted for virological testing by sentinel GPs and community pharmacies, hospital patients, and non-sentinel GPs, as of 20/08/2023 by week of sample collection, Week 40 2022 to Week 33 2023.

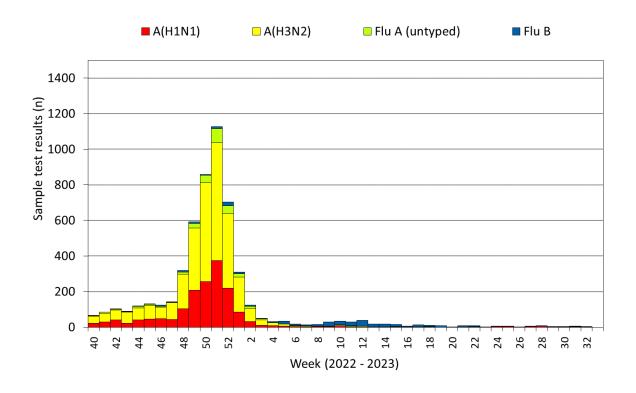


Figure 7. Specimens from hospital patients submitted for RSV, Influenza and SARS-CoV2 testing only, as of 20/08/2023 by week of sample collection, Week 33 2022 to Week 33 2023.

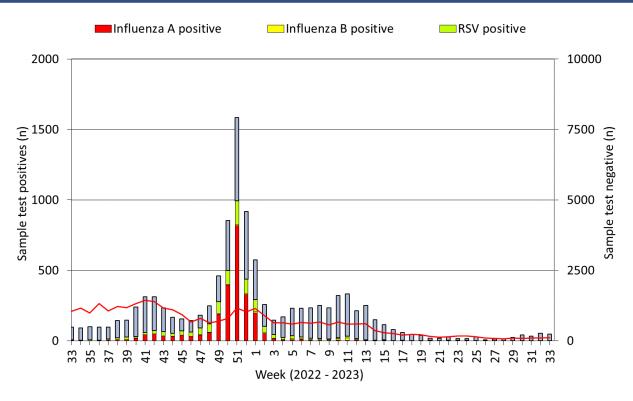
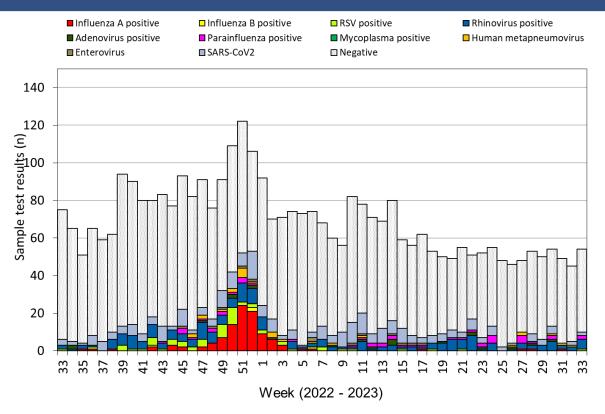
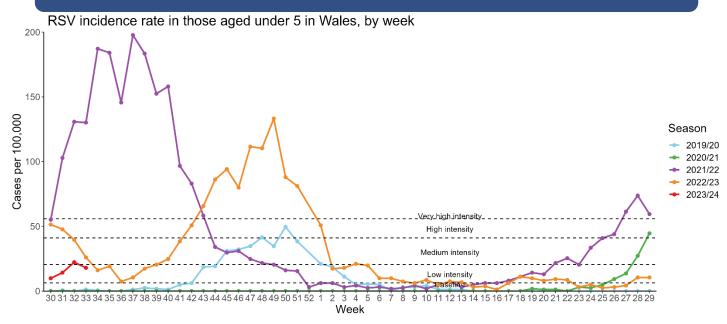


Figure 8. Specimens submitted for virological testing for ICU patients, by week of sample collection, Week 33 2022 to Week 33 2023.



This chart summarises respiratory panel test data and does NOT include data for patients tested SOLELY for SARS-CoV2. Samples which test positive for more than on pathogen will appear more than once in the chart.

Figure 9. RSV incidence rate per 100,000 population aged under five years, week 30 2019 to Week 33 2023.



^{*}RSV seasons are monitored from W30 to W29, the most recent data is presented in red

ARI - Hospital admissions

Figure 10. Seven day rolling sum of cases hospitalised in Wales within 28 days of an influenza positive test result in the community (or up to 2 days post-admission), as of 20/08/2023.

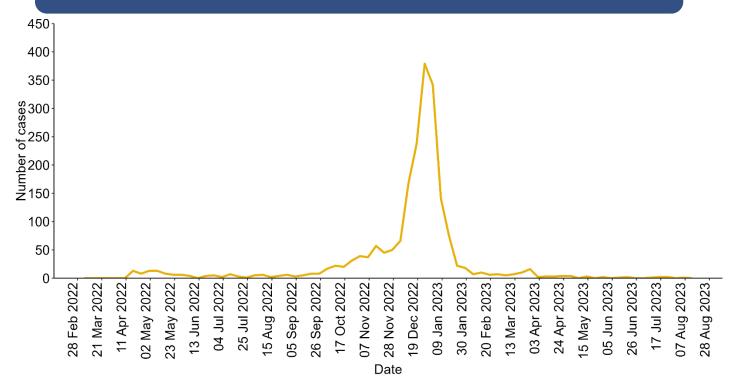


Figure 11. Seven day rolling sum of cases hospitalised in Wales within 28 days of an RSV positive test result in the community (or up to 2 days post-admission), as of 20/08/2023.

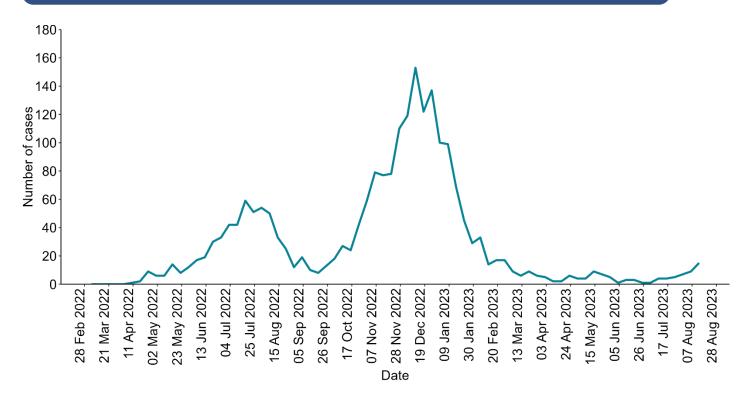
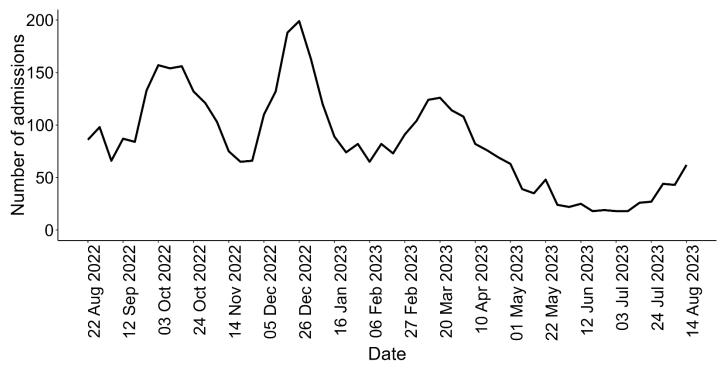
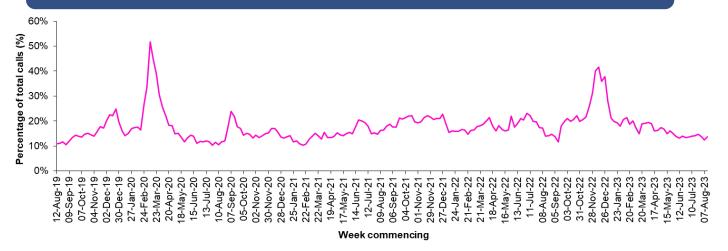


Figure 12. Seven day rolling sum of cases hospitalised in Wales within 28 days of an Covid-19 positive test result in the community (or up to 2 days post-admission), as of 20/08/2023.



Calls to NHS Direct Wales

Figure 13. Influenza related calls to NHS Direct Wales¹ (as a percentage of total calls) from Week 30 2019 - Week 33 2023 (as of 21/08/2023).



Data supplied by Health Statistics and Analysis Unit, Welsh Government.

Flu related calls are the sum of calls recorded as 'cold/flu', 'cough', 'headache', 'fever' and 'sore throat'. Following changes to the NHS Direct calls system, including the start of the 111 pilot, there has been a change in the way in which denominator data are calculated for this chart, NHS Direct Wales now count the total number of nurse triaged calls (i.e. calls which could have symptom data recorded against them), note that 111 includes out-of-hours calls.

Influenza Vaccine Uptake in Wales

Table 3. Uptake of influenza immunisations in GP Practice patients in Wales 2022/23 (as of 25/04/2023).

Influenza immunisation uptake in the 2022/23 season				
People aged 65y and older	76.3%			
People younger than 65y in a clinical risk group	44.2%			
Children aged two & three years	44.0%			
Children aged between four & ten years	63.9%			
Children aged between 11 & 15 years	54.4%			
Total NHS staff	46.2%			
NHS staff with direct patient contact	46.7%			

The end of season report Influenza in Wales 2019/20 is available to download and contains a full breakdown of vaccination uptake amongst eligible groups.

Link to report: https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/annual-influenza-surveillance-and-influenza-vaccination-uptake-reports/

Influenza activity – UK and international summary

- As of Week 32, GP ILI consultations remained stable at 1.4 per 100,000, in England.
- During Week 32, 15 samples testing positive for influenza were reported in England (eight A(not subtyped), four A(H3), and three influenza B). Overall influenza positivity remained low and stable at 0.5%. UK summary data are available from the UKHSA Influenza and COVID-19 Surveillance Report.
- The WHO and the European Centre for Disease Prevention and Control (ECDC) have entered a monthly reporting cycle for influenza and reported that activity across Europe remained at interseasonal levels during weeks 26-30. Source: Flu News Europe: http://www.flunewseurope.org/
- The WHO reported on 21/08/2023, based on data up to 06/08/2023 that globally, influenza detections remain low, with activity in many countries hemisphere now decreasing having peaked in recent weeks.
- In the countries of North America, influenza indicators were mostly at low levels typically observed between influenza seasons.
- Countries in the temperate zones of the southern hemisphere influenza activity decreased, with influenza A
 predominant. Influenza decreased in Australia with similar proportions of influenza A and B viruses reported.
 Influenza A(H1N1(pdm09) and influenza B were predominant in New Zealand.
- In tropical South America, influenza detections were low overall, with influenza A(H1N1(pdm09) and influenza B viruses predominant.
- In the Caribbean countries influenza activity remained low overall.
- In Western Africa, influenza detections were few and decreasing.
- In Middle Africa, the Central African Republic reported sporadic influenza A(H1N1(pdm09).
- In Southern Asia, influenza activity remained low across reporting countries except for Bangladesh where detections of mainly influenza B followed by influenza A viruses remained high. Bhutan reported an increase of mainly Influenza B and Influenza A(H1N1(pdm09)).
- Influenza activity in South-East Asia remained elevated, with influenza A (H1N1(pdm09) and influenza A(H3) predominating.
- In Northern Africa, no detections were reported among those reporting ongoing testing.
- In Central Asia, no influenza detections were reported.
 Source: WHO influenza update: https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update
- Based on FluNet reporting (as of 22/08/2023), during the period from 24/07/2023 06/08/2023 National Influenza Centres and other national influenza laboratories from 108 countries, areas or territories reported influenza surveillance data. The WHO Global Influenza Surveillance and Response System laboratories tested more than 208,169 specimens during that period, of which 5,261 were positive for influenza viruses, 3,827 (72.7%) of those positive for influenza were typed as influenza A (of the subtyped influenza A viruses, 1,015 (57.58%) were influenza A(H1N1)pdm09 and 1,686 (62.42%) were influenza A(H3N2). Of the 5,261 samples testing positive for influenza viruses, 1,434 tested positive for Influenza B (27.26%). Source: Flu Net: https://www.who.int/tools/flunet

Australia and New Zealand update

- In New Zealand, during the week ending 13/08/2023, community influenza-like illness activity (ILI) GP consultations decreased to 7.09 per 100,000. The SARI hospitalisation rate decreased to 12.82 per 100,000 and is now at medium activity levels.
- In New Zealand, the weekly RSV testing positivity through sentinel hospital SARI sampling decreased to 4.0% in the week ending 06/08/2023.

Source: Institute of Environmental Science & Research, New Zealand

In Australia, according to the latest available update (fortnight ending 06/08/2023), influenza-like illness (ILI) activity in the community decreased to 8.04 per 1,000 this reporting period. To date, the majority of nationally reported laboratory-confirmed influenza cases were influenza A (61%).

Source: Australian Influenza Surveillance Report and Activity Updates.

COVID-19 – UK and international summary

- As of 16/08/2023, there were 9.9 new positive PCR episodes per 100,000 population in Wales, for the most recent 7-day reporting period. There were three suspected COVID-19 deaths with a date of death in the most recent 7-day reporting period, reported to Public Health Wales. There were two COVID-19 death registrations in the last reporting period reported by ONS. Latest COVID-19 data from Public Health Wales is available from: https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/
- The latest UKHSA COVID-19 data summary is available from: https://coronavirus.data.gov.uk/
- WHO situation updates on COVID-19 are available from: https://covid19.who.int/

Middle East respiratory syndrome coronavirus (MERS-CoV) – latest update from WHO and ECDC

- On the 10/07/2023 WHO were notified by the United Arab Emirates(UAE) of a case of MERS-CoV. In total, 2,605 laboratory-confirmed cases of locally acquired Middle East Respiratory Syndrome coronavirus (MERS-CoV) worldwide, including 936 deaths. WHO Global Alert and Response website: https://www.who.int/emergencies/disease-outbreak-news
- Rapid risk assessments of the situation from ECDC, which contain epidemiological updates and advice for travellers and healthcare workers, are available from: https://ecdc.europa.eu/en/middle-east-respiratorysyndrome-coronavirus
- Further updates and advice for healthcare workers and travellers are available from WHO: http://www.who.int/emergencies/mers-cov/en/ and from NaTHNaC: https://travelhealthpro.org.uk/news/237/mers-cov-update-travelhealthpro-country-pages

Human infection with avian influenza A(H7N9), China

• The latest WHO Influenza at Human-Animal Interface summary reports that there have been no publicly available reports from China or other countries on influenza A(H7N9) in recent months, but overall risk assessments are unchanged. Previous reports are available from:

https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary. The risk of international spread of avian influenza A(H7N9) is considered to be low at present. However, it is important that clinicians are aware of the possibility of human infection with animal influenza, in persons presenting with severe acute respiratory disease, while travelling or soon after returning from an area where avian influenza is a concern. WHO Global Alert & Response updates: https://www.who.int/emergencies/disease-outbreak-news

Links:

Public Health Wales influenza surveillance webpage:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=25480

Public Health Wales COVID-19 data dashboard:

https://phw.nhs.wales/topics/latest-information-on-novel-coronavirus-covid-19/

Public Health Wales interactive report on hospitalisations in influenza and RSV cases:

https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/ARI-

Hospitaladmissionsdashboard/ARIhospitaladmissionsdashboard?publish=yes

GP Sentinel Surveillance of Infections Scheme:

http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=27918

NICE influenza antiviral usage guidance:

http://www.nice.org.uk/Guidance/TA158

England influenza and COVID-19 surveillance:

https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports-2022-to-2023-season

Scotland seasonal respiratory surveillance:

https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/weekly-national-seasonal-respiratory-report/

Northern Ireland influenza surveillance:

https://www.publichealth.hscni.net/directorate-public-health/health-protection/seasonal-influenza

European Centre for Communicable Disease:

http://ecdc.europa.eu/

European influenza information:

http://flunewseurope.org/

Advice on influenza immunisation

https://phw.nhs.wales/topics/immunisation-and-vaccines/fluvaccine/

Advice on influenza immunisation (for intranet users)

Influenza (sharepoint.com)

For further information on this report, please email Public Health Wales using:

surveillance.requests@wales.nhs.uk